

DRAFT

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TMNAA-A

Tester, Computer Monitor

1. GENERAL. This procurement requires a computer monitor tester.

2. CLASSIFICATION. Type II, Class 5, Style E, and Color R in accordance with MIL-T-28800 for shipboard use.

3. OPERATIONAL REQUIREMENTS. The equipment shall be capable of operation within the minimum accuracies, limits, and specifications set forth below.

3.1 Output bandwidth. 125 MHz minimum.

3.1.1 Pixel resolution. 80-2048 for horizontal and vertical.

3.1.2 Scan frequency. 10-250 kHz for horizontal and vertical.

3.1.3 Output amplitude. TTL, analog, and ECL compatible.

3.1.4 Mode selection. Interlaced and non-interlaced.

3.1.5 Gun selection. RGB and digital.

3.1.6 Sync Adder. RGB.

3.1.7 Polarity selection. Video, H-Sync, V-Sync.

3.2 Sync timing. Adjust automatically for correct sync, back porch, and front porch timing. Sync timing shall also be manually adjustable through the front panel.

3.3 Video Patterns. Raster, Color bars, text, dots, multiburst, windows, staircase, and circle/crosshatch.

3.4 Drive signals. Ranges: 0-300 VPP into 10 K Ω , 0-30 VPP and 0-3 VPP into 100 ohms. Drive signals shall be provided for video, vertical sync and drive, and horizontal sync and drive.

3.4.1 Clipping. Negligible below 250 VPP.

3.4.2 External protection. Output connector shall be protected from externally applied voltages to ± 500 V (DC + peak AC). Floating ground shall be protected from isolation voltages to ± 500 V (DC + peak AC).

3.5 Ring test. A ring test shall be provided for determining coil Q, and finding defective yokes, high voltage transformers, and switching transformers.

4. GENERAL REQUIREMENTS.

4.1 Power source. MIL-T-28800 nominal power source requirements are invoked. Maximum power consumption: 140W.

4.2 Weight. 20 kg (44 lb) maximum.

4.3 Digital interface. Digital interfaces shall be provided in accordance with MIL-T-28800 and RS-232.

4.4 Lithium batteries. Per MIL-T-28800, lithium batteries are prohibited without prior authorization. Requests for approving the use of lithium batteries, including those encapsulated in integrated circuits, shall be submitted to the procuring activity at the time of submission of proposals. Approval shall apply only to the specific model proposed.

4.5 Accessories. The monitor tester shall be provided with connectors or adapters for interfacing MDA/Hercules, EGA, VGA, SVGA, X-Windows, CGA, PGC, Apple, MAC, and ECL monitors.